REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 5-6, 8-9, 12-13, 16-17, 20-21, 24-25, and 27-28 are presently active in this case, Claims 5-6, 8-9, 12-13, 16-17, 20-21, and 24-25 having been amended, Claims 1-4, 7, 10-11, 14-15, 18-19, 22-23, and 26 canceled, and Claims 27-28 added by the present amendment.

In the outstanding Official Action, Claims 1 and 4-14 were objected to as being indefinite, and Claim 1 was rejected under 35 U.S.C. 103(a) as being unpatentable over Schweitzer, III (US 5,325,061) and in view of Wang (US 6,137,666).

In light of the several grounds for objection and rejection, Claims 1-4 have been canceled and replaced by new Claims 27-28, where Claim 27 corresponds to a combination of original Claims 1 and 2, and Claim 28 corresponds to a combination of original Claims 1 and 3. No new matter has been added.

Applicants respectfully traverse the grounds for objection stated against Claims 1 and 4-14.

With respect to the objection to the phrase "data time length" stated in Claim 1, this phrase refers to a time interval from the oldest data to the newest data, both of which are included in the data sampled for a protective relay computation and which are actually used for the computation. In general, the longer the "data time length," the more stable the obtained result; however, response time is delayed. This is believed to be well known in the field of protective relay computation. It is pointed out that the phrase "data time length" was not objected to in the first Official Action mailed November 2, 2005 or in the corresponding applications. It is clearly supported in the Detailed Description of the Invention of the

present application. In view of this explanation, it is respectfully submitted that the phrase

"data time length" stated in Claim 1 is not indefinite, and that the outstanding objection

thereto is traversed.

With respect to the phrase "setting value" stated in Claims 4-14, this phrase refers to a

reference value that is set in consideration of each power system and each fault phenomenon.

If an operating current that flows through a power system exceeds the "setting value," the

apparatus detects that a fault has occurred in the power system. The "setting value" is

commonly used in the field of the present invention. This phrase likewise was not objected

to in the first Official Action mailed November 2, 2005 or in the corresponding applications.

It is clearly supported in the Detailed Description of the Invention of the present application.

In view of this explanation, it is respectfully submitted that the phrase "setting value" stated

in Claims 4-14 is not indefinite, and that the outstanding objection thereto is traversed.

Turning now to the applied prior art, Schweitzer discloses a commonly-used digital

relay, and particularly relates to a means for achieving a zone-N distance relay element.

Wang teaches varying the number of times of confirmation of fault detection with distance in

a zone-1 distance relay element, and tripping a nearby fault early and tripping a remote fault

late.

In contrast to the prior art, according to Applicants' invention, a fault detection relay

element 9 receives digital data (V, I) to perform a fault detecting computation at high speed

within a range (close end) which is narrower than the setting range preset by a zone-1

distance relay element 8-2, in terms of data time length that is shorter than that used for the

computation of the zone-1 distance relay element 8-2.[1]

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[1] Reference numeral designations are exemplary only and are not limiting of the claimed invention.

More specifically, new independent Claim 27 recites a distance relay apparatus comprising two digital filters. One of the two digital filters is a first digital filter 6 which filters data (V, I), which is input to the first directional relay element 8-1 and zone-1 distance relay element 8-2, within a zone precedent to the elements 8-1 and 8-2. The other digital filter is a second digital filter 7 which filters data (V, I), which is input to the fault detection relay element 9, within a zone precedent to the element 9. If a time period required for the filtering of the second digital filter 7 is set shorter than that required for the filtering of the first digital filter 6, the fault detecting computation can be performed at higher speed within the range (close end) which is narrower than the setting range preset by the zone-1 distance relay element 8-2.

New independent Claim 28 recites a distance relay apparatus comprising digital filters 6 and 7 which filter data (V, I), which is input to the first directional relay element 8-1, zone-1 distance relay element 8-2, and fault detection relay element 9, within a zone precedent to [2]these elements. If the data time length required for the fault detecting computation in the fault detection relay element 9 is set shorter than that required for the fault detecting computation in the first directional relay element 8-1 and zone-1 distance relay element 8-2, the fault detecting computation can be performed at higher speed within the zone (close end) which is narrower than the setting range preset by the zone-1 distance relay element 8-2.[3]

Neither <u>Schweitzer</u> nor <u>Wang</u> discloses the above-described feature of new independent Claims 27 and 28. It is therefore respectfully submitted that Claims 27-28 and the remaining claims dependent therefrom, patentably define over a combination of <u>Schweitzer</u> and <u>Wang</u>.

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[2] Reference numeral designations are exemplary only and are not limiting of the claimed invention.
[3] Reference numeral designations are exemplary only and are not limiting of the claimed invention.

Consequently, in view of the present amendment and in light of the above comments, no further issues are believed to be outstanding, and the present application is believed to be in condition for allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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